

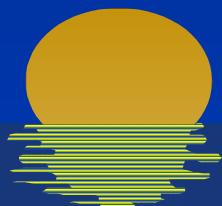
INCIDENT INVESTIGATION



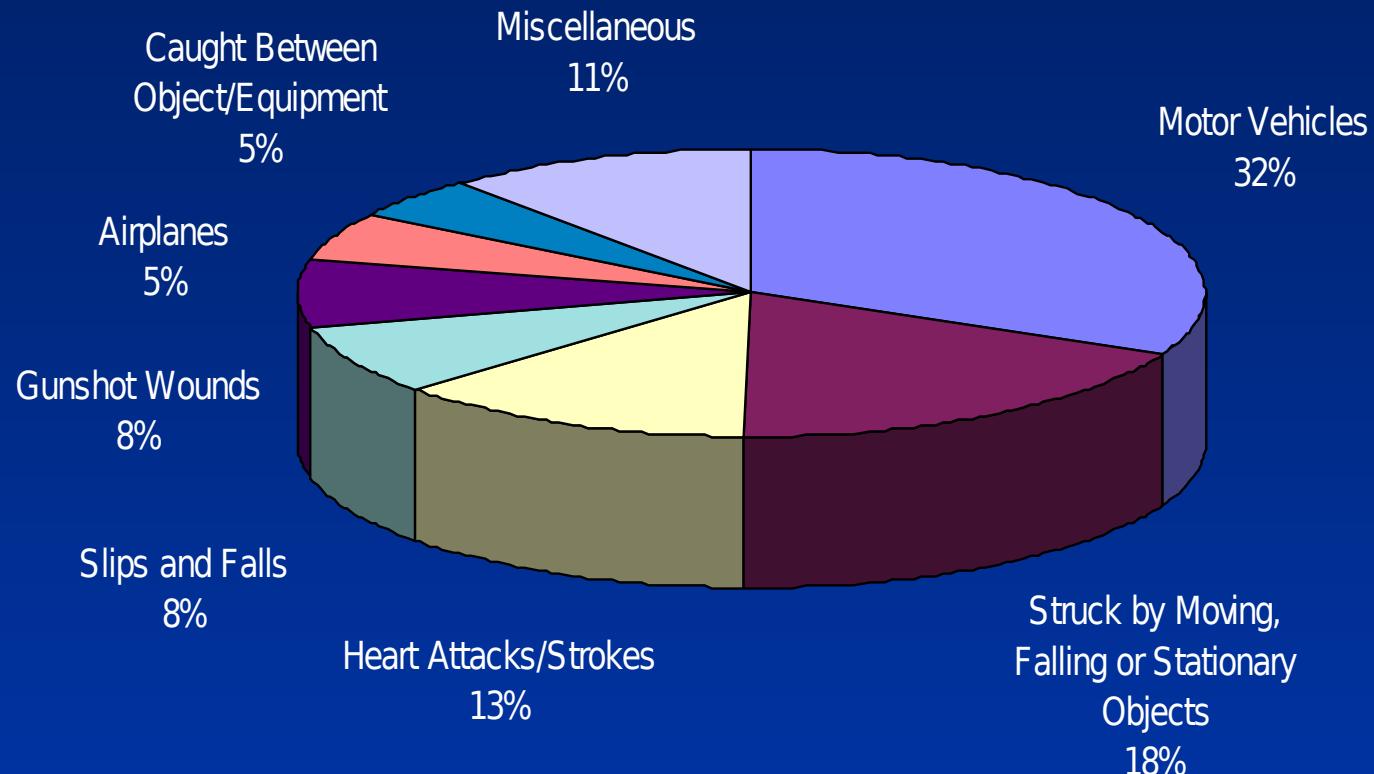
Ken Roberts, MS, CIH, CSP
Environmental Services Officer
Pima County Facilities
Management



What's your Favorite Hobby?



Leading Causes of Workplace Deaths



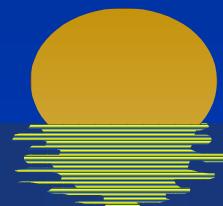
The Aim of the Investigation

1. EXONERATE INDIVIDUALS OR MANAGEMENT
2. SATISFY INSURANCE REQUIREMENTS
3. DEFEND A POSITION FOR LEGAL ARGUMENT
4. OR, TO ASSIGN BLAME



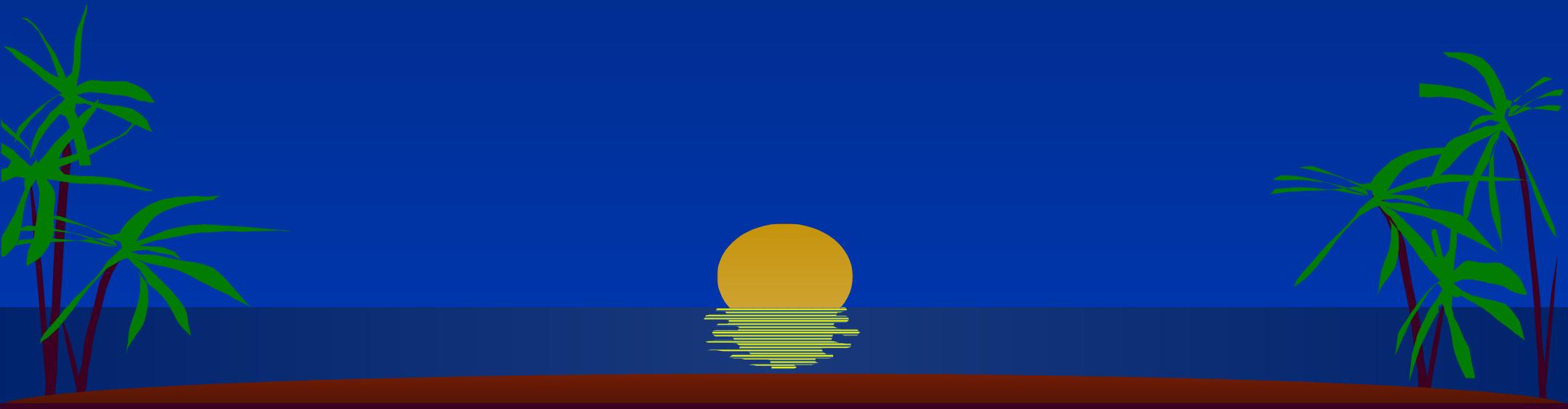
The Aim of the Investigation

THE KEY RESULT SHOULD BE TO
PREVENT A RECURRENCE OF THE
SAME ACCIDENT



THE ACCIDENT

WHAT IS AN ACCIDENT?



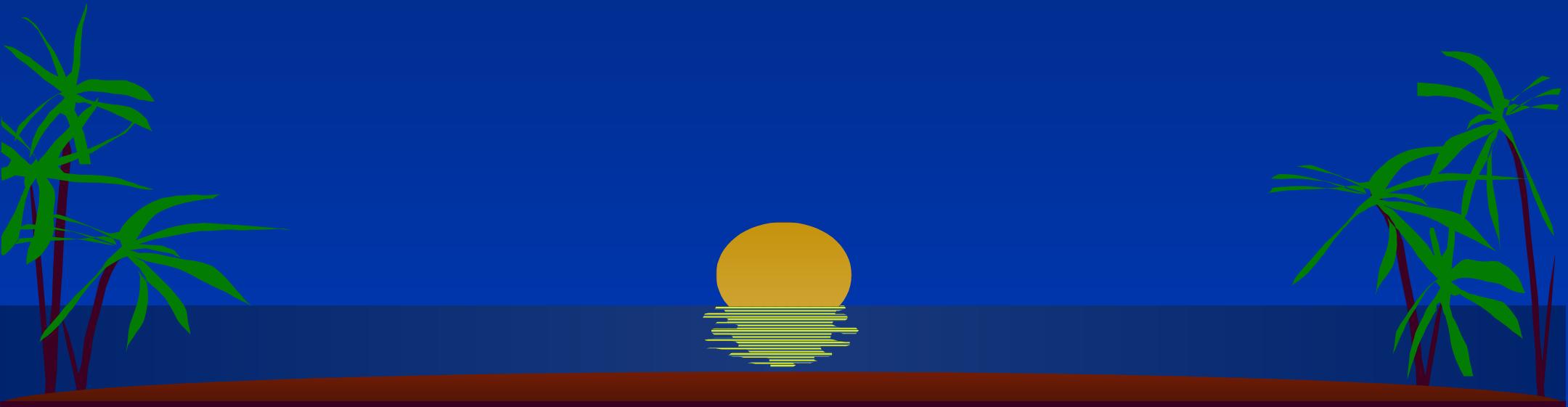
THE ACCIDENT

AN UNPLANNED AND UNWELCOMED
EVENT WHICH INTERRUPTS
NORMAL ACTIVITY.



THE ACCIDENT

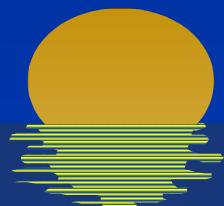
THREE BASIC TYPES OF ACCIDENTS



THE ACCIDENT

MINOR ACCIDENTS:

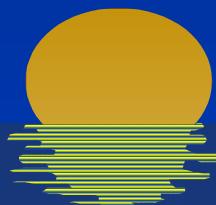
SUCH AS PAPER CUTS TO FINGERS
OR DROPPING A BOX OF
MATERIALS



THE ACCIDENT

MORE SERIOUS ACCIDENTS THAT
CAUSE INJURY OR DAMAGE TO
EQUIPMENT OR PROPERTY:

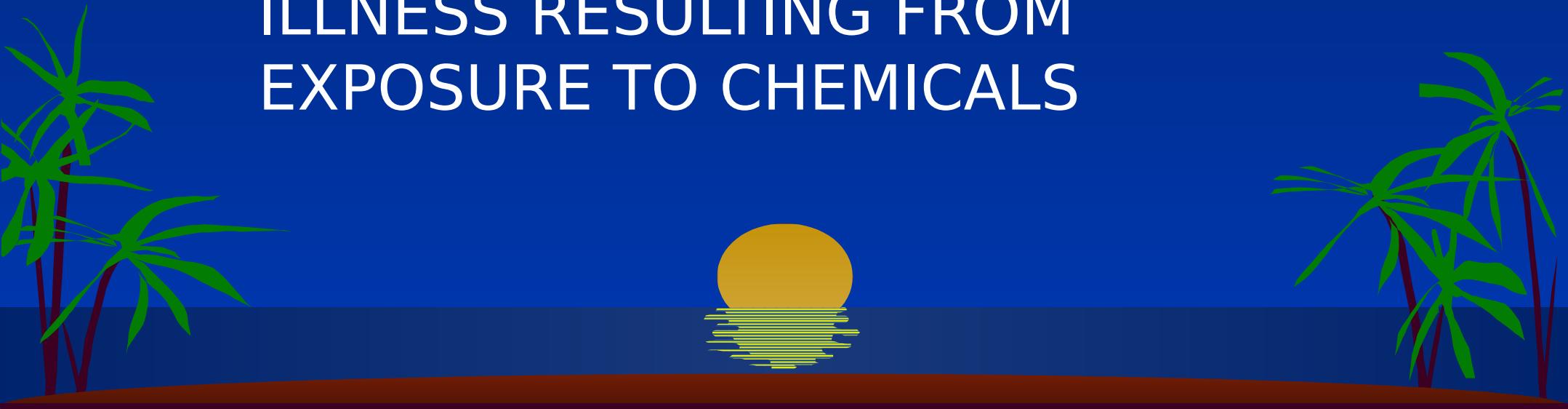
SUCH AS A FORKLIFT DROPPING A
LOAD OR SOMEONE FALLING OFF A
LADDER



THE ACCIDENT

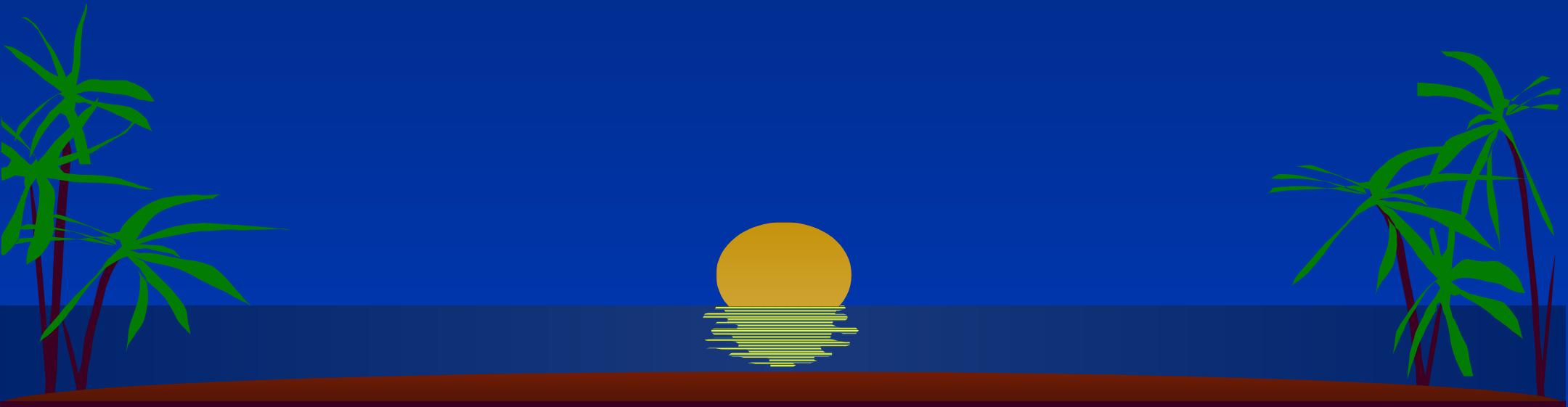
ACCIDENTS THAT OCCUR OVER AN
EXTENDED TIME FRAME:

SUCH AS HEARING LOSS OR AN
ILLNESS RESULTING FROM
EXPOSURE TO CHEMICALS



THE ACCIDENT

ACCIDENTS HAVE TWO THINGS IN
COMMON



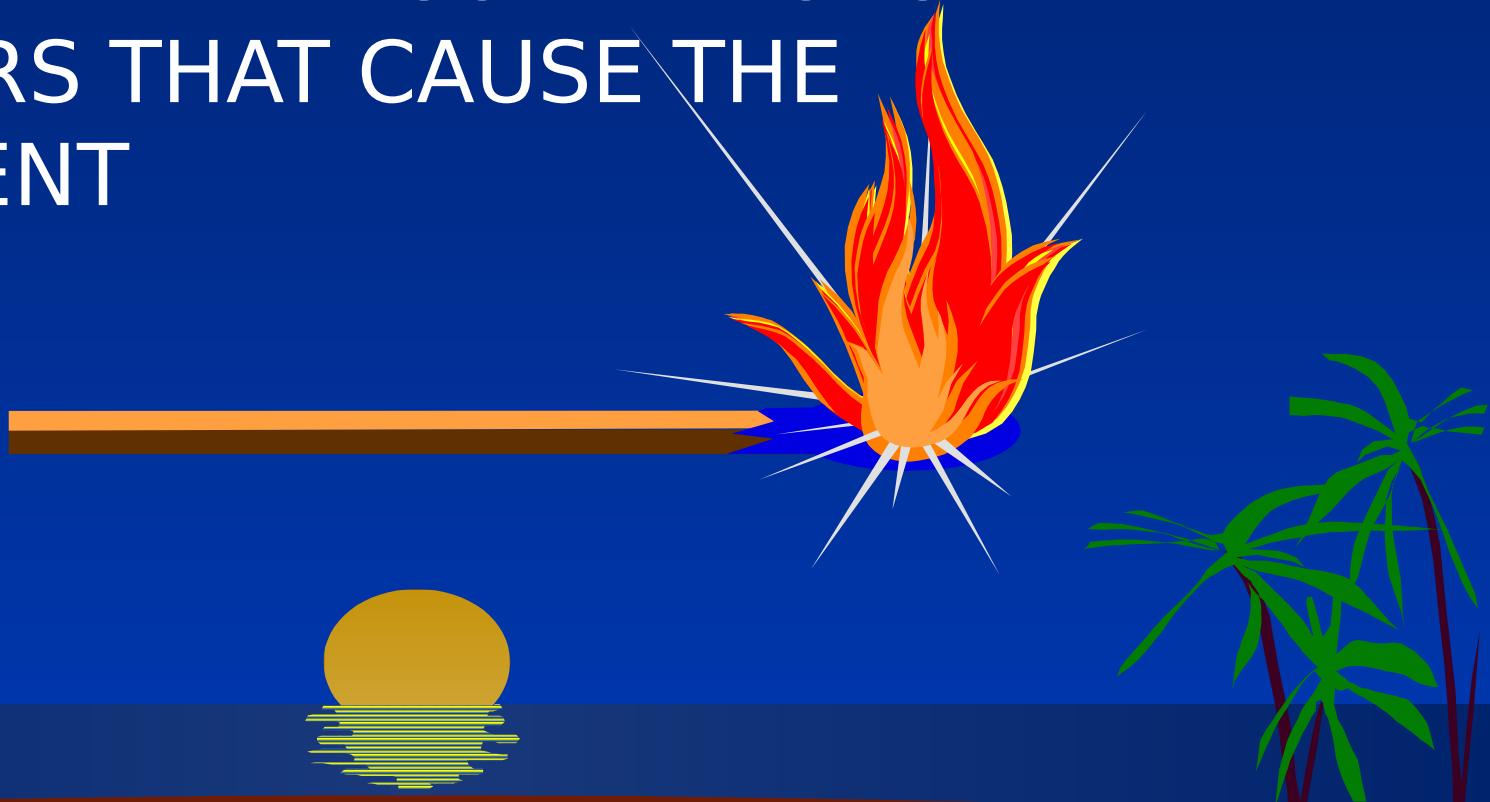
THE ACCIDENT

THEY ALL HAVE OUTCOMES FROM
THE ACCIDENT



THE ACCIDENT

THEY ALL HAVE CONTRIBUTORY
FACTORS THAT CAUSE THE
ACCIDENT



OUTCOMES OF ACCIDENTS

1. NEGATIVE ASPECTS

- DEATH & INJURY
- DISEASE
- DAMAGE TO EQUIPMENT & PROPERTY
- LITIGATION COSTS
- LOST PRODUCTIVITY



OUTCOMES OF ACCIDENTS

2. POSITIVE ASPECTS

- ACCIDENT INVESTIGATION
- CHANGE TO SAFETY PROGRAMS



CONTRIBUTING FACTORS

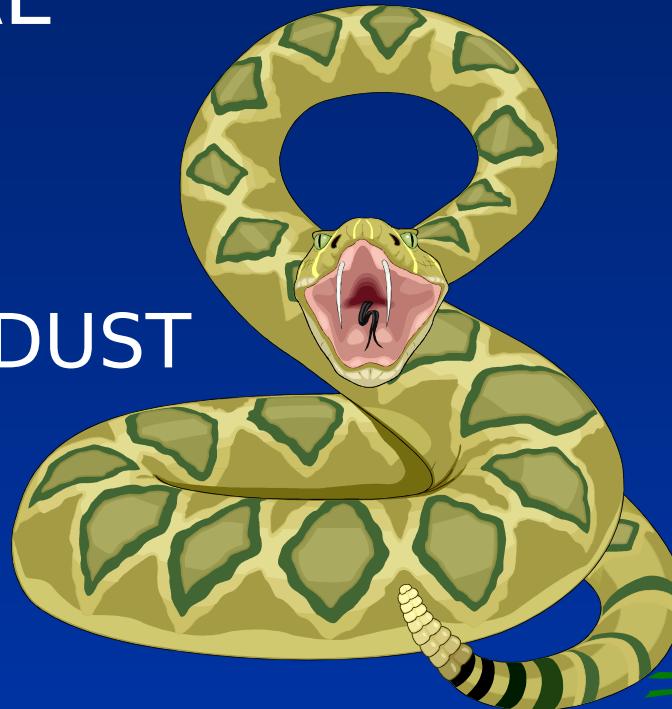
1. ENVIRONMENTAL
2. DESIGN
3. SYSTEMS & PROCEDURES
4. HUMAN BEHAVIOUR



CONTRIBUTING FACTORS

1. ENVIRONMENTAL

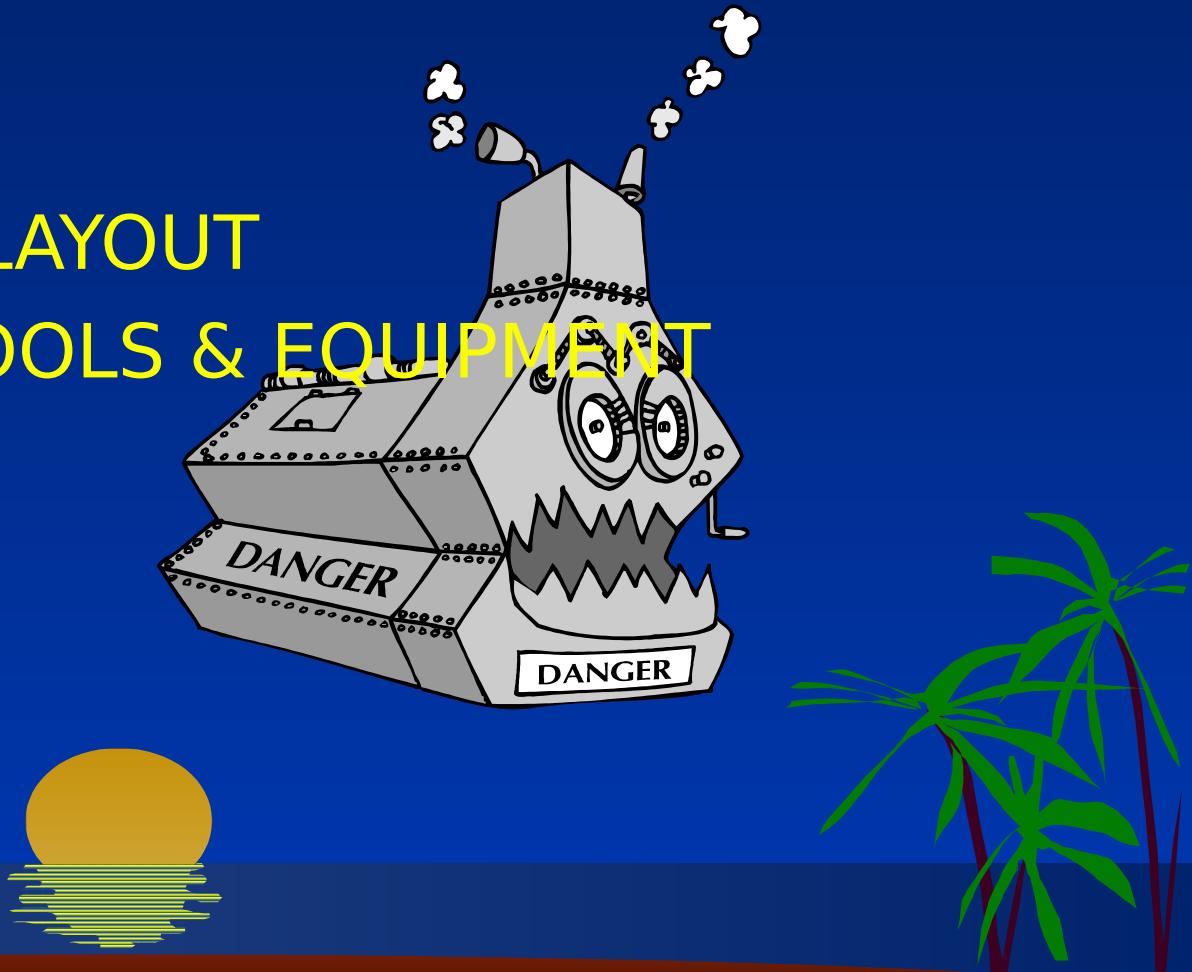
- NOISE
- VAPORS, FUMES, DUST
- LIGHT
- HEAT
- CRITTERS



CONTRIBUTING FACTORS

2. DESIGN

- WORKPLACE LAYOUT
- DESIGN OF TOOLS & EQUIPMENT



CONTRIBUTING FACTORS

3. SYSTEMS & PROCEDURES

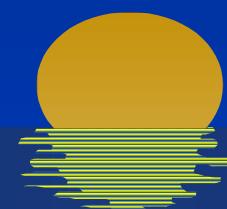
- LACK OF SYSTEMS & PROCEDURES
- INAPPROPRIATE SYSTEMS & PROCEDURES



CONTRIBUTING FACTORS

4. HUMAN BEHAVIOUR

- COMMON TO ALL ACCIDENTS
- NOT LIMITED TO THE PERSON INVOLVED IN THE ACCIDENT



WHO SHOULD INVESTIGATE

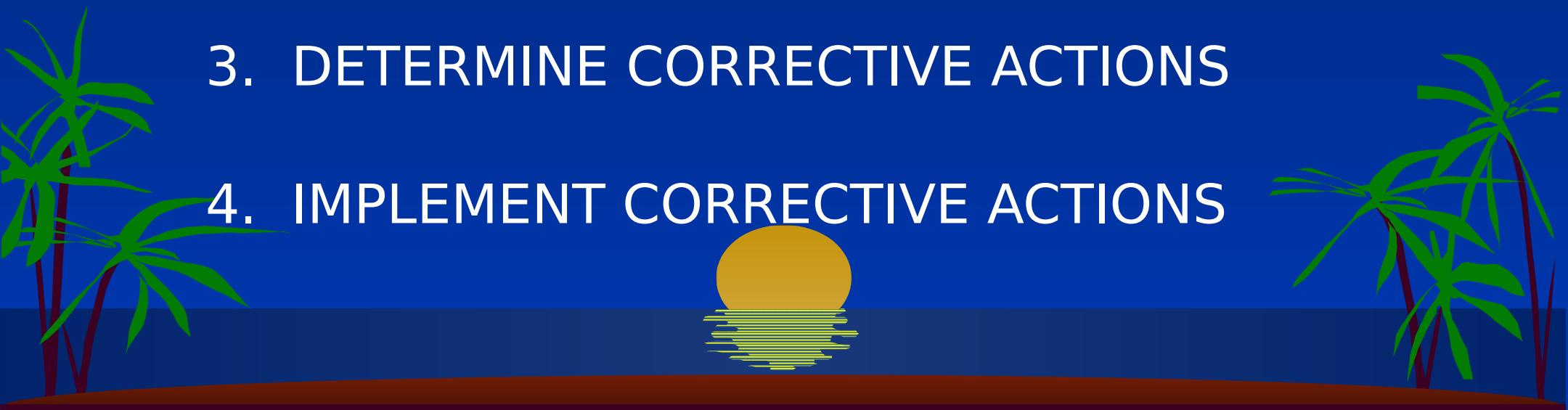
DEPENDENT ON SEVERITY OF THE ACCIDENT

- INVESTIGATION TEAM
 - ♦ INDIVIDUALS INVOLVED
 - ♦ SUPERVISOR
 - ♦ SAFETY SUPERVISOR
 - ♦ UPPER MANAGEMENT
 - ♦ OUTSIDE CONSULTANTS



INVESTIGATION STRATEGY

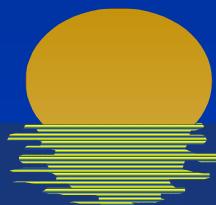
1. GATHER INFORMATION & ESTABLISH FACTS
2. ISOLATE ESSENTIAL CONTRIBUTORY FACTORS
3. DETERMINE CORRECTIVE ACTIONS
4. IMPLEMENT CORRECTIVE ACTIONS



INVESTIGATION STRATEGY

FACT GATHERING

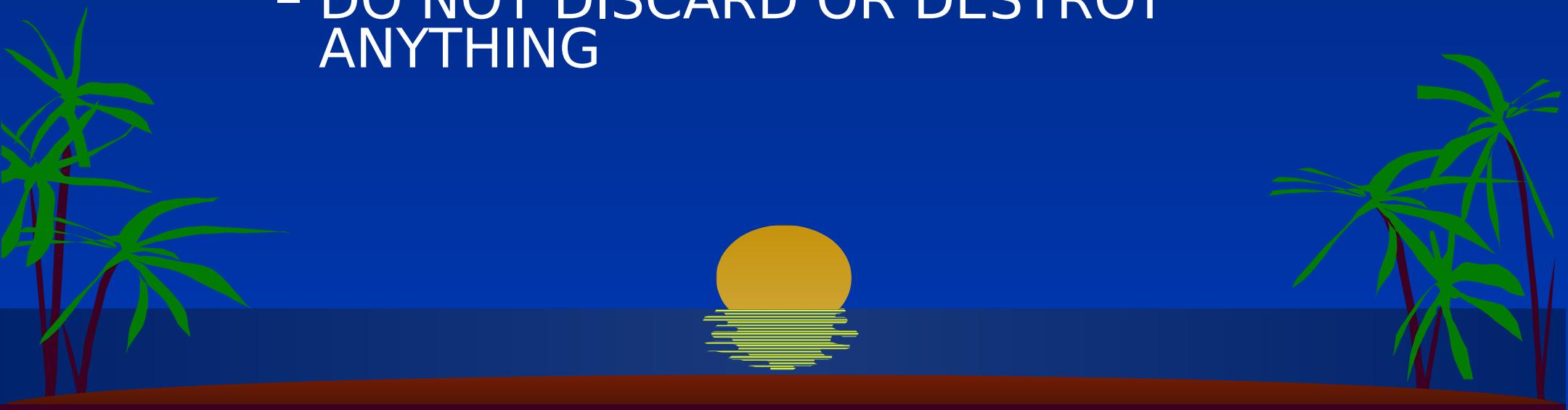
- BE IMPARTIAL & OBJECTIVE
- COMPILE PROCEDURES & RULES FOR THE AREA
- GATHER MAINTENANCE RECORDS ON EQUIPMENT INVOLVED



INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- ISOLATE ACCIDENT SCENE
- PHOTOS & DIAGRAMS
- DO NOT DISCARD OR DESTROY ANYTHING



INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- TIME IS OF THE ESSENCE
- OBTAIN INFORMATION
 - ◆ INJURED
 - ◆ WITNESSES
 - ◆ SUPERVISORS
 - ◆ OTHER PERSONNEL



INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- INTERVIEWS (SEPARATELY)

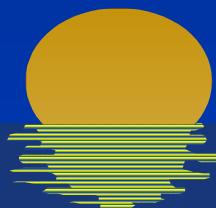
- ◆ WHAT WERE YOU DOING?
- ◆ HOW DO YOU THINK THE ACCIDENT OCCURRED?
- ◆ HOW WERE YOU TRAINED FOR THE JOB?
- ◆ WHAT IS THE SAFETY PROCEDURE FOR THIS JOB?



INVESTIGATION STRATEGY

FACT GATHERING (CONTINUED)

- OBTAIN FACTS NOT OPINIONS
- MAKE IT CLEAR THE OBJECT OF THE INVESTIGATION IS TO AVOID RECURRENCE, NOT TO APPORTION BLAME

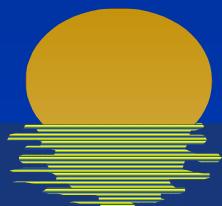


INVESTIGATION STRATEGY

ISOLATE ESSENTIAL CONTRIBUTORY FACTORS

- INVESTIGATION TEAM

- ◆ EVALUATES ALL FACTORS CONCERNED

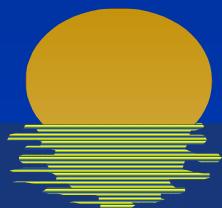


INVESTIGATION STRATEGY

ISOLATE ESSENTIAL CONTRIBUTORY FACTORS

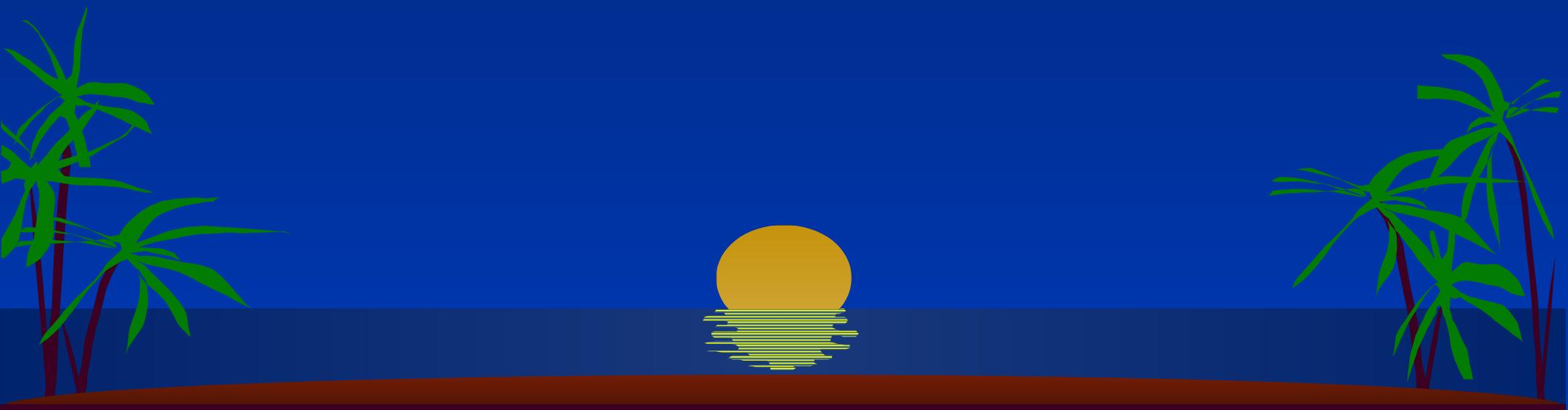
- INVESTIGATION TEAM

- ♦ ISOLATES THE KEY FACTOR(S) BY ASKING THE FOLLOWING QUESTION....



INVESTIGATION STRATEGY

WOULD THE ACCIDENT HAVE
HAPPENED IF THIS PARTICULAR
FACTOR WAS NOT PRESENT?

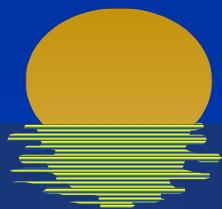


INVESTIGATION STRATEGY

DETERMINE CORRECTIVE ACTIONS

- INVESTIGATION TEAM

- ◆ INTERPRETS & DRAWS CONCLUSION
- ◆ DISTINCTION BETWEEN INTERMEDIATE & UNDERLYING CAUSES

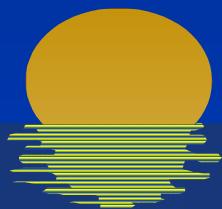


INVESTIGATION STRATEGY

DETERMINE CORRECTIVE ACTIONS

- INVESTIGATION TEAM

- ♦ RECOMMENDATIONS BASED ON KEY CONTRIBUTORY FACTORS AND UNDERLYING CAUSES

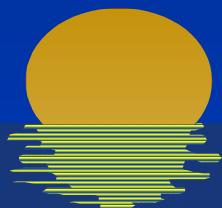


INVESTIGATION STRATEGY

IMPLEMENT CORRECTIVE ACTIONS

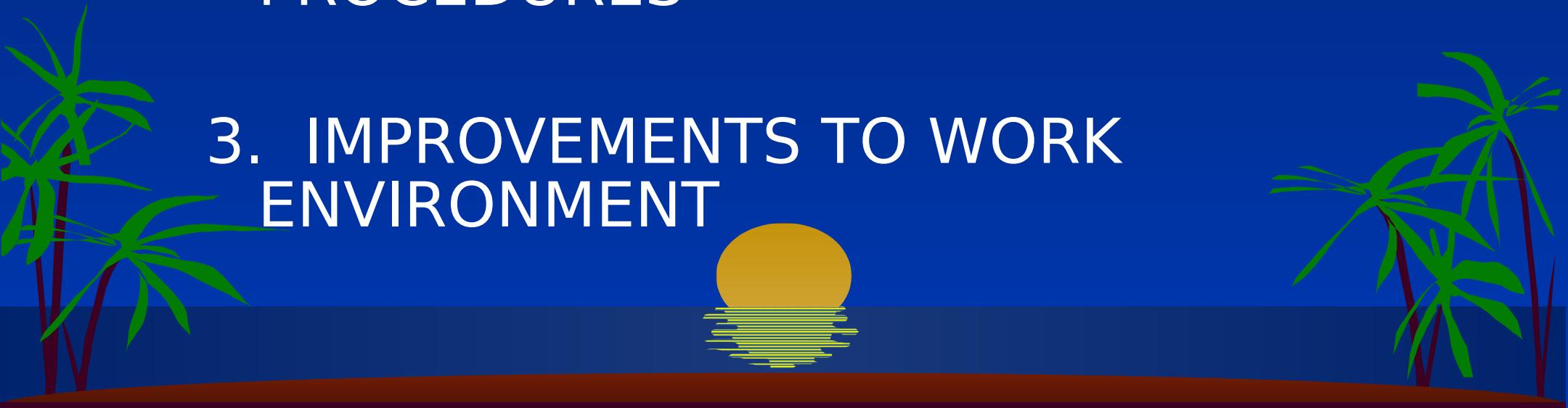
- INVESTIGATION TEAM

- ◆ RECOMMENDATION(S) MUST BE COMMUNICATED CLEARLY
- ◆ STRICT TIME TABLE ESTABLISHED
- ◆ FOLLOW UP CONDUCTED



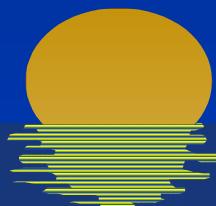
BENEFITS OF ACCIDENT INVESTIGATION

1. PREVENTING RECURRENCE
2. IDENTIFYING OUT-MODED PROCEDURES
3. IMPROVEMENTS TO WORK ENVIRONMENT



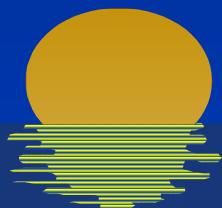
BENEFITS OF ACCIDENT INVESTIGATION

4. INCREASED PRODUCTIVITY
5. IMPROVEMENT OF OPERATIONAL & SAFETY PROCEDURES
6. RAISES SAFETY AWARENESS LEVEL



BENEFITS OF ACCIDENT INVESTIGATION

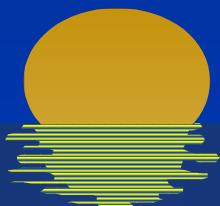
WHEN AN ORGANIZATION REACTS SWIFTLY AND POSITIVELY TO ACCIDENTS AND INJURIES, ITS ACTIONS REAFFIRM ITS COMMITMENT TO THE SAFETY AND WELL-BEING OF ITS EMPLOYEES



Are we to leave our children a country
ridden with accidents and their
corresponding burden of human and
economic loss?

Or . . . can we prove that as Americans, we
can progress, both technically and
morally, to provide our citizens with a life
and work style worthy of the sufferings,
sacrifices and expectations of our
founding fathers?

Raymond J. Colvin, Sr.
NYU.....1959



**SAFETY
FIRST**

**THE SAFE WAY IS
THE BEST WAY**

